

ABSTRACT OF THE DISCLOSURE

On receiving a link channel assignment request or a link channel reassignment request from a mobile station, a wireless base station specifies a unique word (UW) that is not assigned to any other mobile stations, and sends a channel assignment notification containing the specified UW to the requesting mobile station. The base station also sends the specified UW to its user processing unit, which extracts a signal sent from the requesting mobile station and generates a signal to be sent to this mobile station. The base station then defines a reference signal based on the sent UW, and adjusts each weight vector by using the defined reference signal and a signal estimated to have been sent from the requesting mobile station, thereby directing the directivity pattern to the requesting mobile station.